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TRAFFIC(U.S.A.)

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THE HARVEST OF NORTHEASTERN FURBEARERS, PAST AND PRESENT

by

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and

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presented at

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I. History

One must look back to the early 1500s to fully understand the evolution of the trade in furbearers in the northeastern states. At that time, early French explorers returned to Europe with news of the vast numbers of furs available in North America. The French then claimed possession of much of the coast and encouraged settlement in order to expand the fur trade and bolster the French economy. The Dutch and the English quickly followed suit. At first, Europeans obtained furs from the Indians who traded pelts for blankets, beads, weapons, and liquor. Later, many colonists turned to trapping as a profession. The European demand for furs at this time cannot be overemphasized. The European and Russian furbearers were depleted or extirpated over much of their range, and furs were basic and necessary winter garments in largely unheated houses. Suddenly, the North American continent offered an apparently unlimited supply of furs which was a tremendous incentive to further explore the continent westward and southward. North America was founded on its fur industries, and the first large fortune made was that of John Jacob Astor, a fur merchant.

Beaver, otter, elk, deer, and bear populations began declining in the northeast by the early 18th century as a result of heavy fur harvesting and exporting (Table 1). By 1650, beavers were greatly reduced in the coastal plain between Maine and South Carolina; by 1750, beavers were so rare in New England that New York became the major source of supply. The eastern races of elk, bison, and caribou were exterminated by the late 19th century. The last sea mink, a large mink endemic to New Brunswick, Nova Scotia, and Maine, was killed in 1880. The attitude that predators were vermin to be systematically eliminated resulted in the extirpation of wolves, cougars, and bears by the early 1800s. Attention was transferred to the previously scorned trash species such as opossums, moles, skunks, and muskrats.

The industrial revolution, which produced inexpensive clothing, and the economic hardships of World War I caused a temporary lull in the fur trade. There followed a period of prosperity which made furs available to more moderate income groups for whom fur became a symbol of wealth and glamour. Pelt prices were high, and mink, marten, fisher, otter, and beaver populations again quickly became depleted nationwide. For example, otter pelts were worth $120 each in 1920, which is twice the average otter pelt price of 1977. The demand for furs still exceeded the supply, so fox and mink ranches became major suppliers. Southern species, once considered inferior to the more haevily and densely furred northern species, began to be trapped in earnest, particularly in Louisiana and Florida.

In the 1930s and 1940s, certain states began setting trapping seasons for the more valuable furbearers such beaver, marten, otter, and fisher, but year-round trapping, denning, and poisoning of predators continued.

Increased industrialization in the 1950s and 1960s, resulting in habitat destruction and higher pollution levels, helped precipitate furbearer population declines. Destruction of wetlands in northeastern states further decreased the numbers of beaver, otters, and muskrat. In the 1960s, the popularity of furs dwindled until successful marketing of "fun furs" boosted sagging sales, so that by 1966, the United States had become the leading consumer and producer of furs. These furs, using primarily lamb and rabbit, were styled to appeal to a younger market and were relatively inexpensive. Some expensive wild furs, such as that of wolf, raccoon, lynx, and spotted cats, were sold. The enormous popularity of spotted cat fur in Europe and the United States in the late 1950s and 1960s may have helped caused the alarming decline of spotted cat populations throughout the world. Environmentalists and humane organizations focused on spotted cats in their campaign against the fur industry. As a result of increased public consciousness with respect to the depletion of wildlife, the popularity of furs decreased. However, changes in marketing techniques again allowed for a resurgence of that popularity in the late 1970s. The export of furs from the United States to Japan and Germany, the largest

fur consumers in the world, has increased over the last decade. In that time, pelt prices have risen 1122%, and retail fur sales increased 372% between 1970 and 1978. Annual fur sales peaked at $750 million in 1978, and $1 billion is expected for 1979.

The average price for the pelts of all furbearers, with the exception of the beaver, has risen sharply; striking examples are the bobcat, which rose from $10 in 1970 to $126 in 1977, the otter, which rose from $18 in 1970 to $65 in 1977, the fisher, which rose from $26.50 in 1970 to $100.41 in 1977, and the gray fox, which rose from $3.50 in 1970 to $34 in 1976. Not surprisingly, the harvest of many species has followed this price incentive. For instance, nationwide, the bobcat harvest rose from 10,822 in 1970 to 106,547 in 1976, the red fox harvest rose from 151,818 in 1971 to 314,774 in 1977, the striped skunk harvest rose from 16,486 in 1971 to 173,722 in 1977, the opossum harvest rose from 101,278 in 1970 to 1,064,725 in 1976, and the raccoon harvest rose from 1,089,803 in 1970 to 3,832,802 in 1976. In the northeast, the trapping of red and gray foxes, otters, martens, muskrats, and skunks has increased dramatically (Table 3).

The Endangered Species Act (1973) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), which came into effect in 1975, were enacted in the attempt to regulate trade in endangered, rare, and protected species. Lynx, bobcats, and otters are North American furbearers listed on Appendix II. of the CITES and are thereby subject to federal regulation with respect to their harvesting for export. The Endangered Species Scientific Authority (now the Office of the Scientific Authority) accumulated data from state management agencies, and, in 1977, imposed export quotas and required pelt-tagging for otters, bobcats, and lynx on a state by state basis. This information is summarized in Table 2. The states objected vehemently to federal interference in an area previously subject to only state control. Quotas were imposed for only that year, but presently, annual updates are required from each state with information on biological status, harvest data, regulatory regimes, and future management plans. Several states have closed seasons for the three species in question (Table 1), and others have state determined harvest objectives.

II. Methodology

Data for fifteen species of furbearers occurring in the northeastern United States have been obtained from 1) The International Association of Fish and Wildlife Agencies, 2) letters and telephone conversations with state wildlife agency authorities, and 3) the Endangered Species Scientific Authority, in the case of the bobcat and the otter. Several states report only the numbers of animals trapped and not those shot by hunters. For some species, such as the bobcat, more are shot incidentally by game hunters than are taken by professional trappers. The International Association of Fish and Wildlife Agencies' questionnaire asked for the number of pelts rather than the harvest numbers, and, as a result, some states interpreted this as only the number of pelts sold rather than the actual take. For instance, in California, a harvest of 3618 bobcats was reported to that association for the 1976-1977 season, but the Endangered Species Scientific Authority determined the actual take to be 12,800.

Methods of reporting the take to state agencies vary. Some states require reports directly from the trapper, but often harvest data are obtained from fur dealer reports or tagging for export. For many furbearers, the states do not require any reports from the trapper or hunter, although the tendency is now towards required reporting. Some state agencies are gathering harvest data from voluntary questionnaires. In New York, where the reported take of most furbearers is not required and fur dealers are not licensed, some data are obtained only from questionnaires. Animal Damage Control totals also contribute to harvest totals.

Dealer reports are an unreliable method of obtaining harvest numbers. Total numbers of pelts obtained may be understated to allow for tax free income, and often states have no authority to supervise dealers. A trapper may not be required to sell his pelts in the state of capture, nor may the fur dealer be required to report his purchases to that state. Some trappers take their furs directly to fur auctions in Canada. Pelts can even be bought and sold more than once from smaller dealers to bigger dealers. The problem is compounded when dealing occurs across state lines. However,

this type of confused reporting system is more characteristic of the southeast than the northeast where states depend more on tagging and direct reports for harvest numbers.

Furbearer harvest data from eleven northeastern states have been reported in Table 3 and Figures 3a-g.

Marten and Fisher: The marten and fisher continue to be relatively scarce in the northeast as a result of overtrapping. Of the eleven northeastern states covered by this report, the marten is present only in Maine, New Hampshire, and New York. Maine opened the fisher season in 1973, and New York has had a marten season only since 1978. New Hampshire retains a closed season. The fisher is not present in Connecticut, Delaware, and Pennsylvania and had a closed season in Rhode Island at the time of this report. An average take of only 3864 fisher has been reported in all eleven states from 1970 to 1977.

Coyote: Several state wildlife officials have evidence that the coyote population is increasing in the northeastern states. Maine and New Hampshire began reporting the take of coyotes in the early 1970s, and New York will require reporting in 1980.

Black bear: Most states classify black bear as a game animal, not a furbearer (New Hampshire does not classify it as either) and do not include it in fur management programs. Very few are trapped, and few pelts are sold regardless of the method of take. Data on black bear are based largely on hunter reports and were therefore not reported by the International Association of Fish and Wildlife Agencies. Data were obtained directly from the states, and, because only the northeastern states were contacted, totals for the country are unavailable for comparison.

Miscellaneous: The spotted skunk, short-tailed weasel, and nutria are species of furbearers that occur to varying degrees in the northeastern states. The spotted skunk occurs only in Maryland and has had no harvest recorded in the past ten years. The short-tailed weasel take is included with the long-tailed weasel harvest. The nutria occurs only in Delaware and Maryland; only the Maryland harvest is reported.

Some species such as the opossum, coyote, bobcat, long-tailed weasel, and skunk show sharp increases in numbers harvested starting with the 1976 season. This probably reflects better reporting practices rather than actual trapping increases.

III. State by state synopses

The following state by state synopses provide background information and should be used in conjunction with the tables and figures.

Connecticut: Not present: marten and fisher
Protected: bobcat and black bear

There have been no confirmed sighting of fisher although they may be present in the northern part of the state.

The report of the taking of gray fox is required only if it is taken on state owned lands; the actual harvest is considerably higher.

Delaware: Not present: black bear, bobcat, coyote, fisher, and marten
Protected: beaver and red fox

Report of the take is required for only otter, mink, raccoon, and marten.

There is no legal take of red fox; fox hunters are allowed to chase them on horseback but not to harm them.

Beaver were extirpated natural reintroduction occurred in recent years from Maryland. The low beaver population is protected. The state regards them as undesirable, and wildlife agents trap them for release in Maryland.

Maine: Protected: opossum

The gray fox population has been low in recent years and is said to occur only in the southwest of the state. Harvest numbers have been included in red fox totals. Fox carcass collection was instigated two years ago, so fox data should now be reported separately.

Maryland: Not present: marten

Protected: black bear (starting in 1979) and bobcat

The spotted skunk occurs in Maryland but none has been reported taken.

The fisher was reintroduced to West Virginia several years ago and now occurs in small numbers in western Maryland.

New Jersey: Not present: marten, fisher, and short-tailed weasel

Protected: bobcat, coyote, and otter

Trapper harvest surveys did not begin until 1974.

New York: No species is protected or absent, although marten were protected until the 1978 season.

The black bear pelt must be tagged, but very few are sold. Most bears are mounted as trophies.

Coyote pelt tagging is required as of 1 April 1980, and harvest numbers will be reported.

Raccoon data are from a telephone survey; muskrat data are from questionnaires.

Pennsylvania: Not present: marten and fisher

Protected: otter and bobcat

Rhode Island: Not present: marten and black bear

Protected: coyote, fisher, beaver, and bobcat

The beaver population is increasing, and re-opening of the season is anticipated.

The fisher may not be present but is protected in any case.

One coyote was shot in 1979 as a nuisance. A wildlife agent estimated that perhaps two have been shot in the last ten years.

Massachusetts: Not present: marten

Protected: coyote (starting in 1979)

In 1970, the bear hunting season was reduced to just six days late in the year when most of the bears are often already hibernating. The bear take is therefore very small.

New Hampshire: Protected: marten

The fisher season was closed for 1977 and 1978 seasons.

The coyote is considered a furbearer.

The black bear is a game animal whose pelt has not been sold since 1945.

Seals are required on all furbearer pelts except the muskrat, weasel, and skunk.

The opossum is the only furbearer whose take need not be reported.

The last lynx was harvested in 1964; the lynx is currently classified as endangered and has been protected since 1971.

Carcasses of otter, fisher, and coyote must be turned over to the state. Research is being conducted on these species' age composition, sex ratios, and reproduction.

Vermont: Protected: marten

There was an unregulated harvest and a bounty on the bobcat until 1970. From 1970 to 1975, the take was not required to be reported.

Only the fisher, beaver, otter, and bobcat pelt data are recorded individually. Data on other furbearers are from furbuyer reports.

ACKNOWLEDGEMENTS

This report was prepared at very short notice at the request of the organizers of the Northeast Endangered Species Conference and, due to the constraint of time, we had to rely on the good graces of a large number of people. We would like to thank Dr. Peter Escherich of the Office of the Scientific Authority who opened his files to us and gave us many helpful leads. Dr. Duane Pursley and Mr. Eugene Deems gave us permission to use data published in the North American Furbearers and recent unpublished harvest figures. Ms. Ginger Merchant of Defenders of Wildlife advised us on the bobcat trade, and Guy Hodge of the Humane Society of the United States ransacked his files on our behalf; to both our grateful thank you. We are particularly indebted to the following people from state wildlife agencies who cheerfully answered our numerous questions and queries for missing data: Joseph Risigo (Connecticut), Tom Wittendale (Delaware), Henry Hilton and Chester Banasiak (Maine), Chet McCord (Massachusetts), Howard Nowell (New Hampshire), Joseph Penkala (New Jersey), Mark Brown (New York), James Chadwick (Rhode Island), and Walter Cottrell (Vermont).

REFERENCES

DEEMS, E.F., Jr., & D. PURSLEY. 1978. North American Furbearers. International Association of Fish and Wildlife Agencies.

FEDERAL REGISTER:
Vol. 43, No. 52 16 March 1978
Vol. 43, No. 69 10 April 1978
Vol. 43, No. 152 7 August 1978
Vol. 43, No. 171 1 September 1978
Vol. 44, No. 135 12 July 1979
Vol. 44, No. 175 7 September 1979
Vol. 44, No. 188 26 September 1979

LERNER, W. 1975. Historical Statistics of the United States - Colonial Times to 1970. U.S. Department of Commerce.

NILSSON, G., C. STEVENS & J. GLEIBER. in press. Facts About Furs. Animal Welfare Institute. Washington, D.C.

IV. Tables and Figures

Abbreviations used in the tables are:

X- species not present

NR- harvest of species not reported. Reporting may not be required or data may just be absent.

CS- closed season, species is protected

CS?- the wildlife management official in Rhode Island is uncertain of the exact year of closure.

I- harvest of gray fox included with red fox

NA- data for bear take in New Jersey exist but are not readily available.

?- unable to determine why data were not reported; data may not be required or season may be closed

The histogram in Figure 1 shows the export of furs in the 1700s from all the British American colonies with the proportion from New England depicted in the white section of each bar.

The histograms in Figures 2a-c provide comparisons of the harvests in 1970 and 1976 seasons for all fifteen species of furbearers. The range of pelt prices for each species over the same time period is given below each bar.

Histograms (Figures 3a-g) have been provided for a few species to show increases in harvest numbers and pelt prices. The white part of the histogram represents the northeastern states' proportion of the take in the continental United States. The numbers at the bottom of each bar are the percentage that the northeastern states' take represents. Pelt prices are depicted linearly.

TABLE 1

EXPORTS OF FURS FROM AMERICAN CROWN COLONIES TO ENGLAND (£ STERLING)

Year	New England	New York	Pennsylvania	Virginia/ Maryland	All Colonies
1700	2435	4962	723	2433	16,284
1710	1595	2148	88	754	7840
1720	2119	5393	849	467	19,377
1730	2010	2611	1642	493	22,348
1739	2481	5073	329	641	15,196
1750	1015	5710	1909	282	22,817
1760	946	1023	1879	21	19,985
1770	2453	2340	1148	169	47,758

Source: Lerner, 1975.

EXPORTS OF FURS FROM NORTH AMERICA IN 1763

Beaver	75,040
Bear	8,340
Otter	8,060
Fisher	2,800
Marten	43,247
Wolverine	59
Wolf	606
Lynx	4,150
Mink	1,030
Fox	2,300
Raccoon	39,000
Muskrat	6,080
Elk	1,568
Deer	6,511

Source: Poland, 1763. Cited in Nilsson, 1980.

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Figure 1

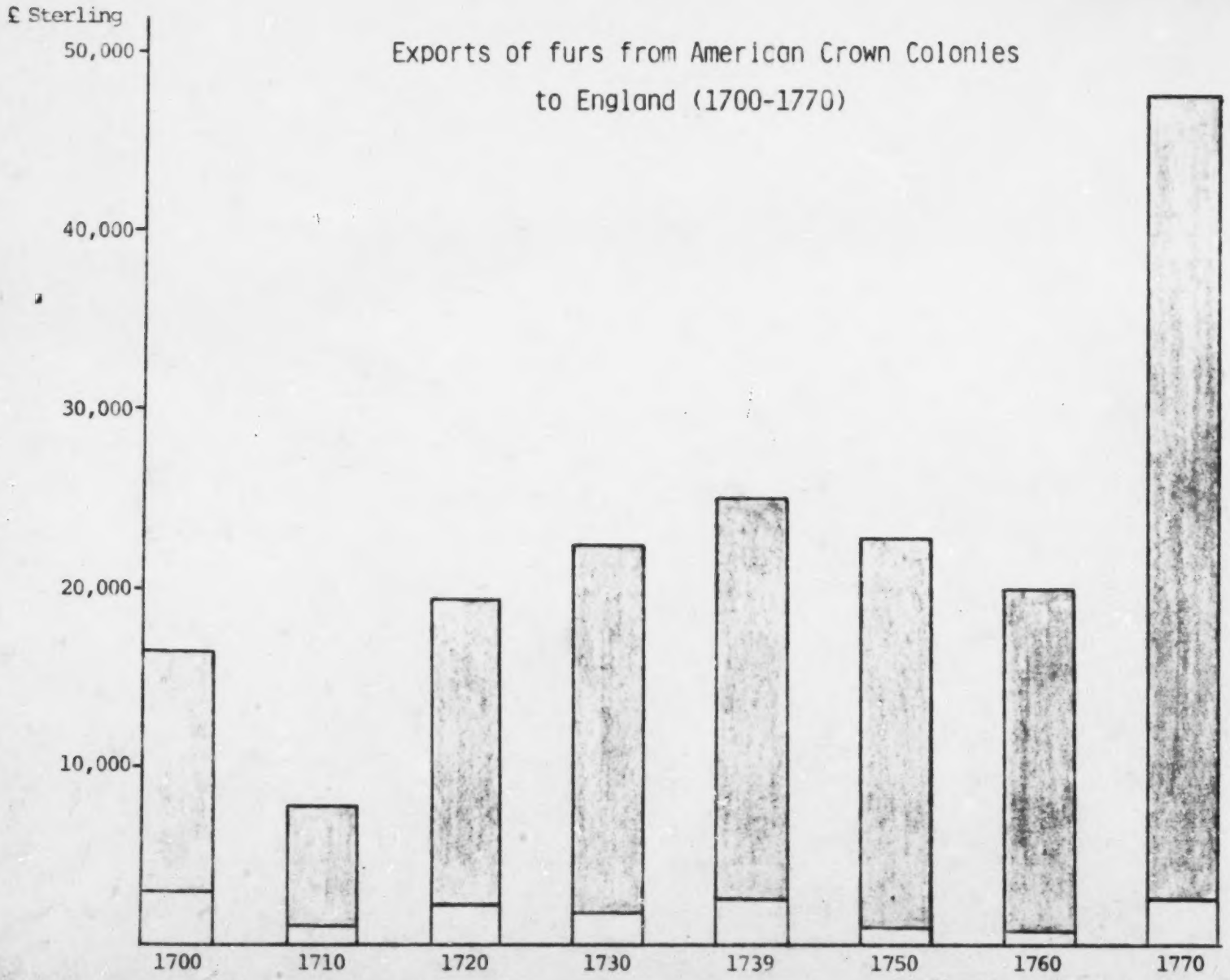

TABLE 2

BOBCAT AND OTTER HARVEST AND EXPORT DATA (1978 and 1979)

Bobcat *Lynx rufus*	Harvest 77-78	Exports FY 78	Harvest 78-79	Exports FY 79
Connecticut	CS	-	CS	-
Delaware	x	-	x	-
Maine	389	8	280	111
Maryland	CS	-	CS	-
Massachusetts	19	0	29	9
New Hampshire	CS	-	CS	-
New Jersey	CS	-	CS	-
New York	90	5	159	34
Pennsylvania	CS	-	CS	-
Rhode Island	CS	-	CS	-
Vermont	92	0	59	5

Otter *Lutra canadensis*	Harvest 77-78	Exports FY 78	Harvest 78-79	Exports FY 79
Connecticut	63	13	74	42
Delaware	70	0	45	16
Maine	675	622	693	549
Maryland	187	4	262	171
Massachusetts	163	58	121	98
New Hampshire	236	26	206	113
New Jersey	CS	-	CS	-
New York	467	27	677	259
Pennsylvania	CS	-	CS	-
Rhode Island	15	7	25	21
Vermont	42	43	76	36

CS: Closed season, animal is protected.

Source: Endangered Species Scientific Authority records, 1980.

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Figure 2b Comparison of Harvest Numbers in the 1970-1971 and 1976-1977 Seasons

Range of Pelt Prices from 1970-1976

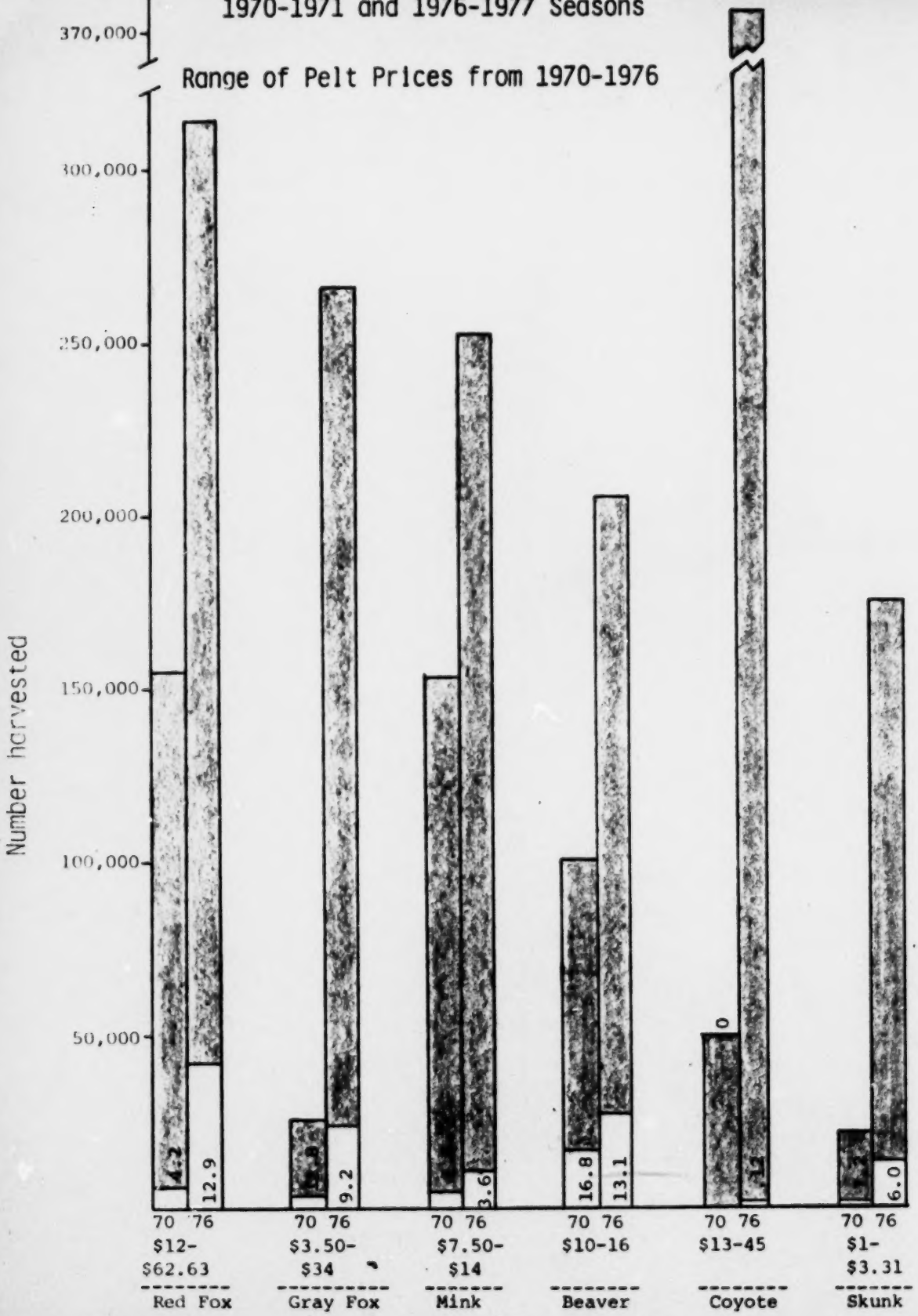

Figure 2c

Comparison of Harvest Numbers in the 1970-1971 and 1976-1977 Seasons

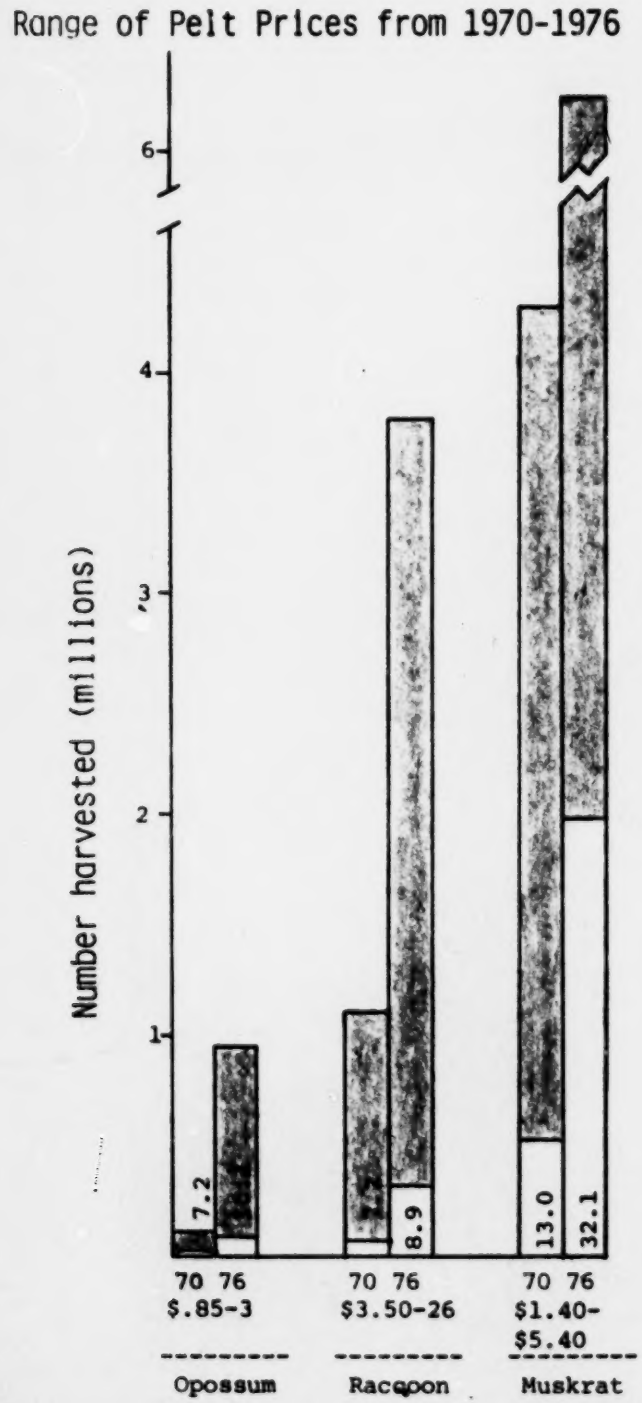

Figure 2a

Comparison of Harvest Numbers in the 1970-1971 and 1976-1977 Seasons

Range of Pelt Prices from 1970-1976

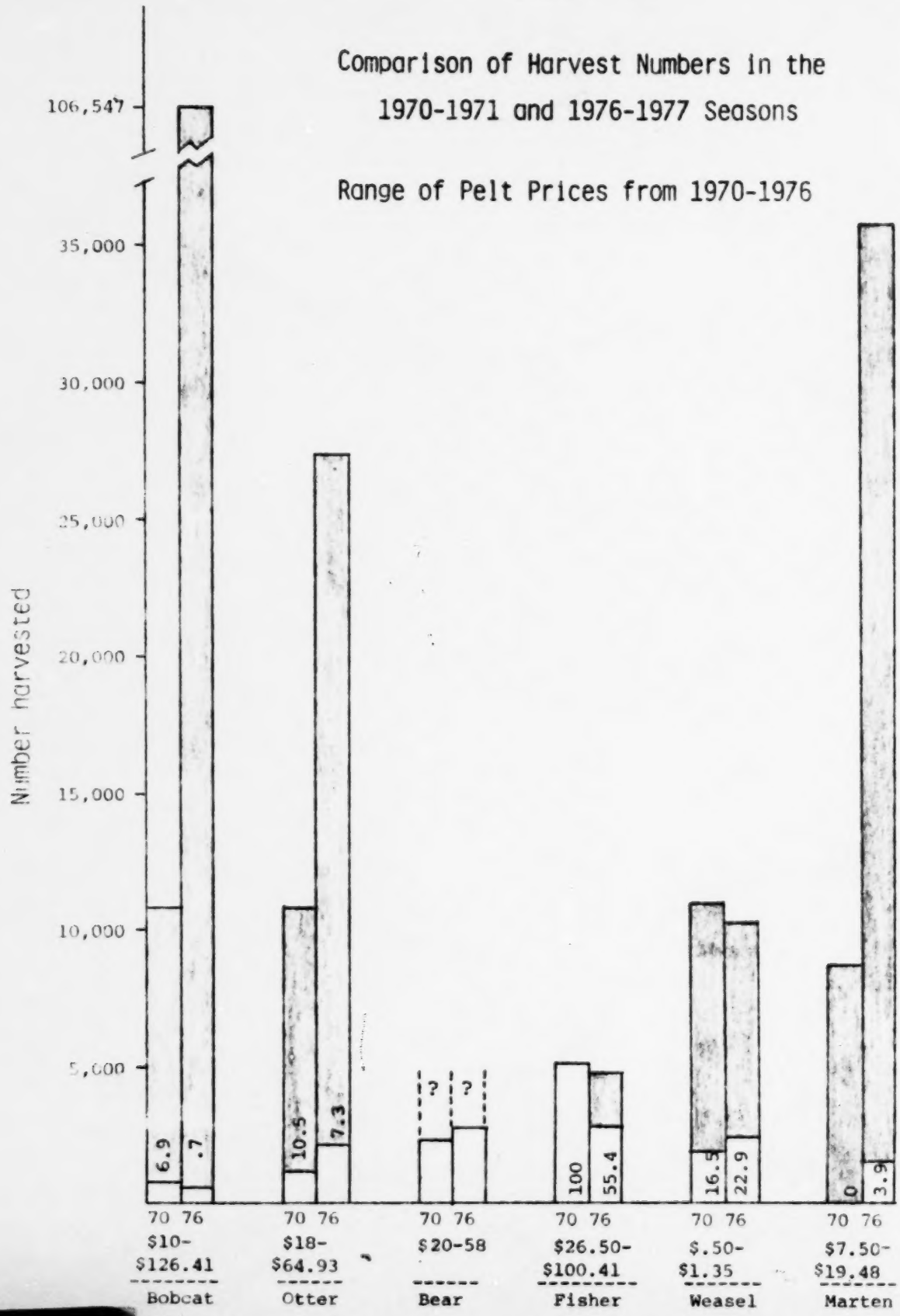

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TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Bobcat *Lynx rufus*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	NR	NR	CS	CS	CS	CS	CS	CS	CS
Delaware	X	X	X	X	X	X	X	X	X	X
Maine	730	654	641	573	544	373	436	389		
Maryland	NR	NR	NR	NR	NR	NR	NR	CS	(280) CS	CS
Massachusetts	NR	NR	NR	9	8	11	13	19		
New Hampshire	10	22	40	55	33	38	(14) 89	CS	(29) CS	CS
New Jersey	CS	CS	CS	CS	CS	63*	CS	CS	CS	CS
New York	?	?	?	161**	?	?	?	90	159	
Pennsylvania	NR	NR	NR	NR	NR	NR	(NR) NR	CS	CS	CS
Rhode Island	NR	NR	NR	NR	NR	NR	(84) NR	CS	CS	CS
Vermont	NR	NR	NR	NR	NR	85	82	92	59	
Total	740	676	681	637	585	570	(84) 620	590		
							(707)	(590)	(527)	
% of country	6.9	7.2	4.5	2.2	1.9	1.5	.9	.7		
							(.9)	(.7)	(.6)	
Avg. pelt price	$10.00	30.00	46.00	55.00	55.00	125.00	125.00	126.41		

* Probable error. New Jersey indicates season was closed. Not included in total.

** Reported in Federal Register March 1978 II. Not reported by New York. Not included in total.

Figures in brackets are from Endangered Species Scientific Authority data and are given only when differing from International Association of Fish and Wildlife Agencies' and state wildlife agencies' data.

Figure 3a

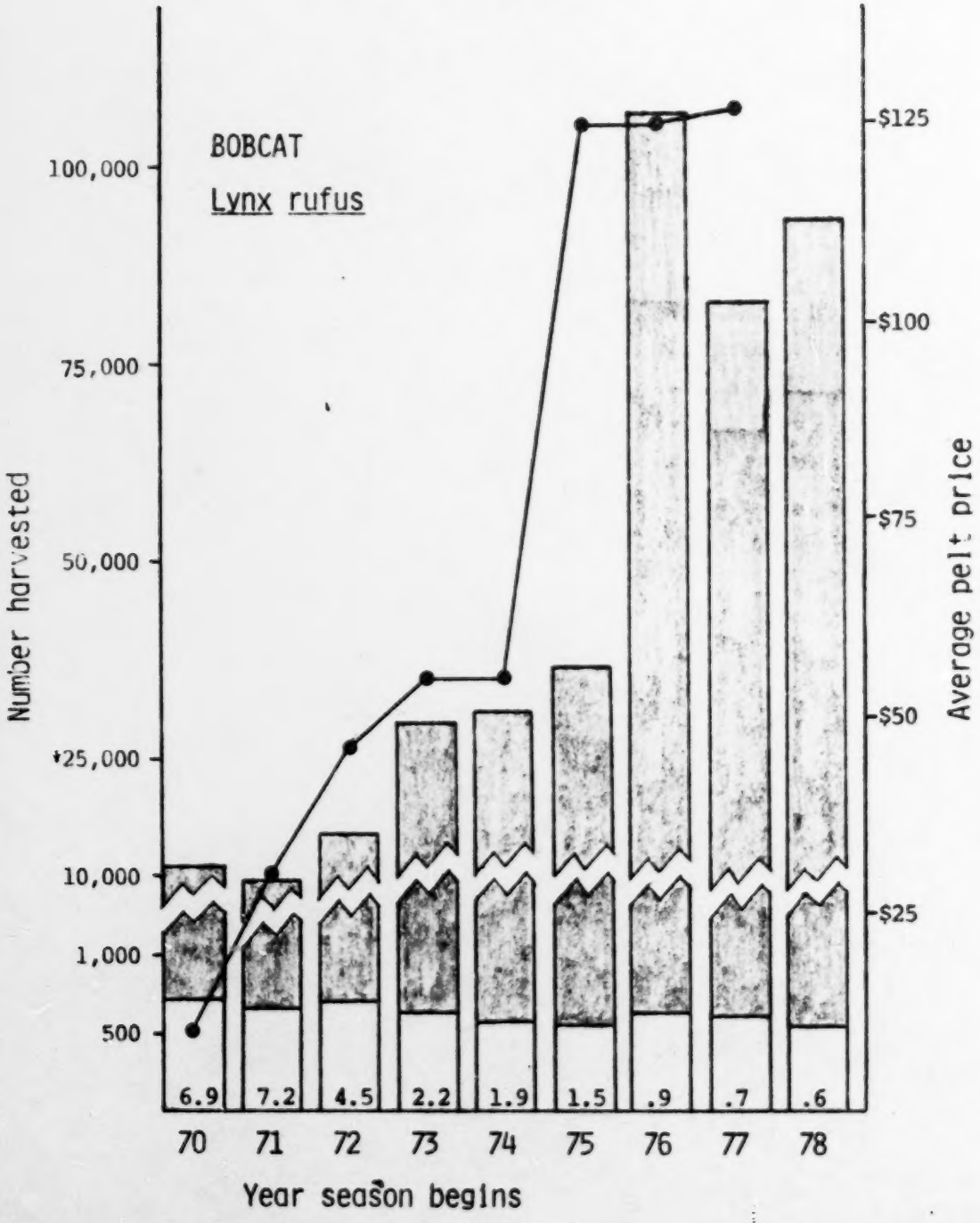
BOBCAT
Lynx rufus
100,000
75,000
50,000
25,000
10,000
1,000
500
Number harvested
$125
$100
$75
$50
$25
Average pelt price
6.9
7.2
4.5
2.2
1.9
1.5
.9
.7
.6
70
71
72
73
74
75
76
77
78
Year season begins

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Otter *Lutra canadensis*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	14	7	7	13	14	10 (61)	63	74	
Delaware	30	25	25	25	25	25	50 (56)	62 (70)	(45)	
Maine	588	637	593	871	1007	898	531 (898)	675	(693)	
Maryland	131	360	218	208	141	130	182 (181)	191 (187)	262	
Massachusetts	76	53	71	66	66	103	108 (110)	163	121	
New Hampshire	135	157	208	186	170	181	205	236	206	
New Jersey	CS	CS	CS	CS	CS	CS	CS	CS	CS	
New York	171	329	413	405	496	533	636 (633)	507 (467)	(677)	
Pennsylvania	NR	NR	NR	NR	NR	NR	NR	CS	CS	
Rhode Island	4	1	CS	CS	CS	CS	34	25 (15)	25	
Vermont	NR	NR	11	27	28	27	45	42	76	
Total	1135	1576	1546	1795	1946	1911	1801 (2223)	1964 (1918)	(2179)	
% of country	10.5	10.5	8.2	11.2	12.0	11.4	5.4 (5.5)	7.3 (7.1)	(7.3)	
Avg. pelt price	$18.00	25.00	35.00	32.00	31.00	50.00	53.00	64.93		

Figures in brackets are from Endangered Species Scientific Authority data and are given only when differing from International Association of Fish and Wildlife Agencies' and state wildlife agencies' data.

Figure 3b

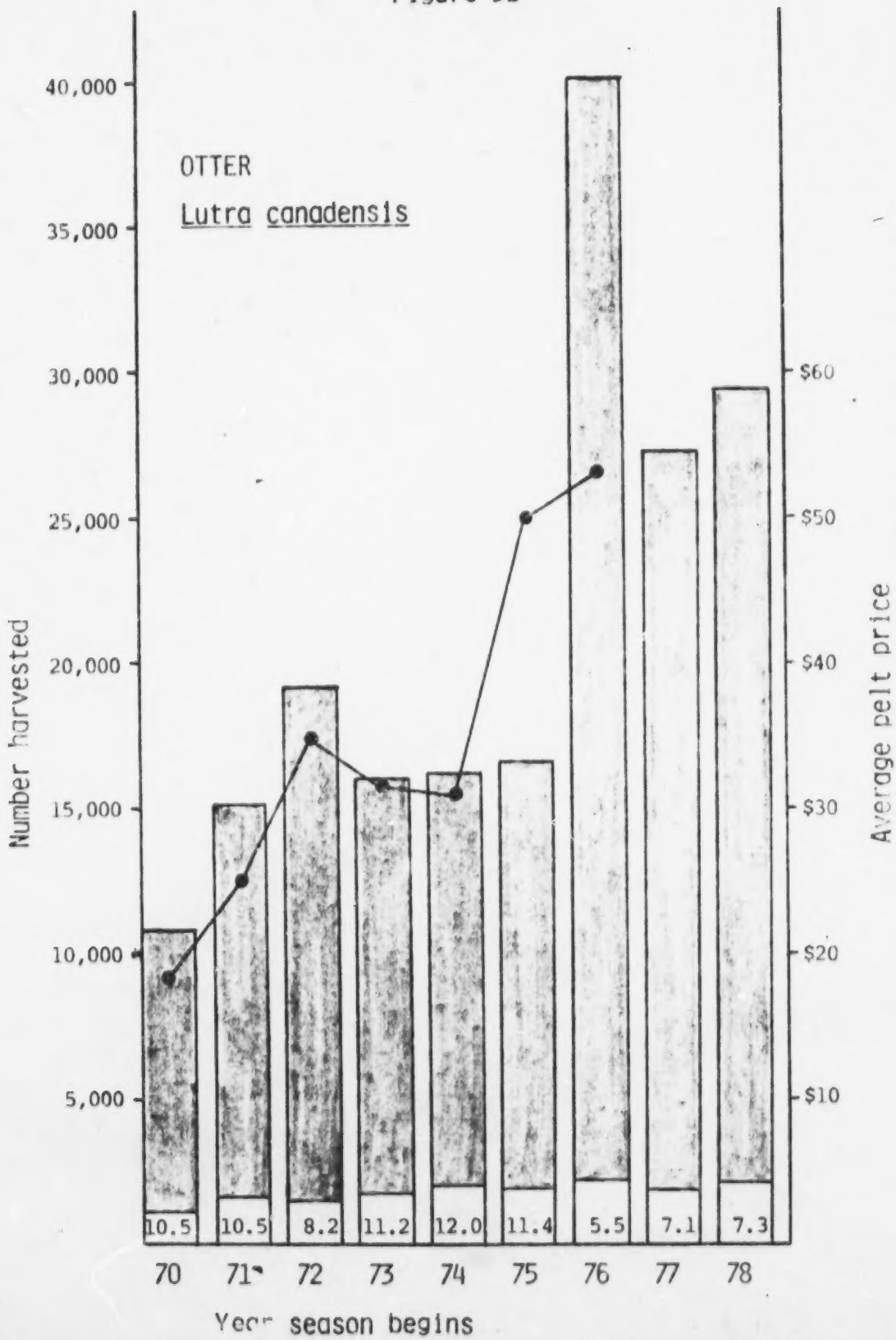
OTTER
Lutra canadensis
40,000
35,000
30,000
25,000
20,000
15,000
10,000
5,000
Number harvested
$60
$50
$40
$30
$20
$10
Average pelt price
10.5
10.5
8.2
11.2
12.0
11.4
5.5
7.1
7.3
70
71
72
73
74
75
76
77
78
Year season begins

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Fisher *Martes pennanti*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	X	X	X	X	X	X	X	X	X	X
Delaware	X	X	X	X	X	X	X	X	X	X
Maine	3524	1641	2546	2196	2118	1918	1407	2022		
Maryland	NR	NR	NR	NR	NR	NR	NR	NR		
Massachusetts	CS	CS	NR	13	6	1	17	37		
New Hampshire	566	1130	1008	740	456	238	277	CS	CS	709+
New Jersey	X	X	X	X	X	X	X	X	X	X
New York	918	869	1008	1299	1210	1691	839	NR		
Pennsylvania	X	X	X	X	X	X	X	X	X	X
Rhode Island	NR	NR	CS?	CS?	CS	CS	CS	CS	CS	CS
Vermont	NR	NR	NR	NR	250	353	NR	612		
Total	5008	3640	4562	4248	4040	4201	2540	2671		
% of country	100	100	99.9	99.9	99.9	99.9	87.8	55.4		
Avg. pelt price	$26.50	37.00	27.00	57.00	57.00	81.00	95.00	100.41		

Marten *Martes americana*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	X	X	X	X	X	X	X	X	X	X
Delaware	X	X	X	X	X	X	X	X	X	X
Maine	CS	CS	CS	157	249	CS	481	1401		
Maryland	X	X	X	X	X	X	X	X	X	X
Massachusetts	X	X	X	X	X	X	X	X	X	X
New Hampshire	CS	CS	CS	CS	CS	1	CS	CS	CS	CS
New Jersey	X	X	X	X	X	X	X	X	X	X
New York	CS	CS	CS	CS	CS	CS	CS	CS	46	60
Pennsylvania	X	X	X	X	X	X	X	X	X	X
Rhode Island	X	X	X	X	X	X	X	X	X	X
Vermont	X	X	X	X	X	X	X	X	X	X
Total	0	0	0	157	249	0	481	1401	46	60
% of country	0	0	0	.8	1.9	0	1.7	3.9		
Avg. pelt price	$ 8.00	9.00	12.00	13.00	7.50	15.00	14.00	19.48		

Figure 3c

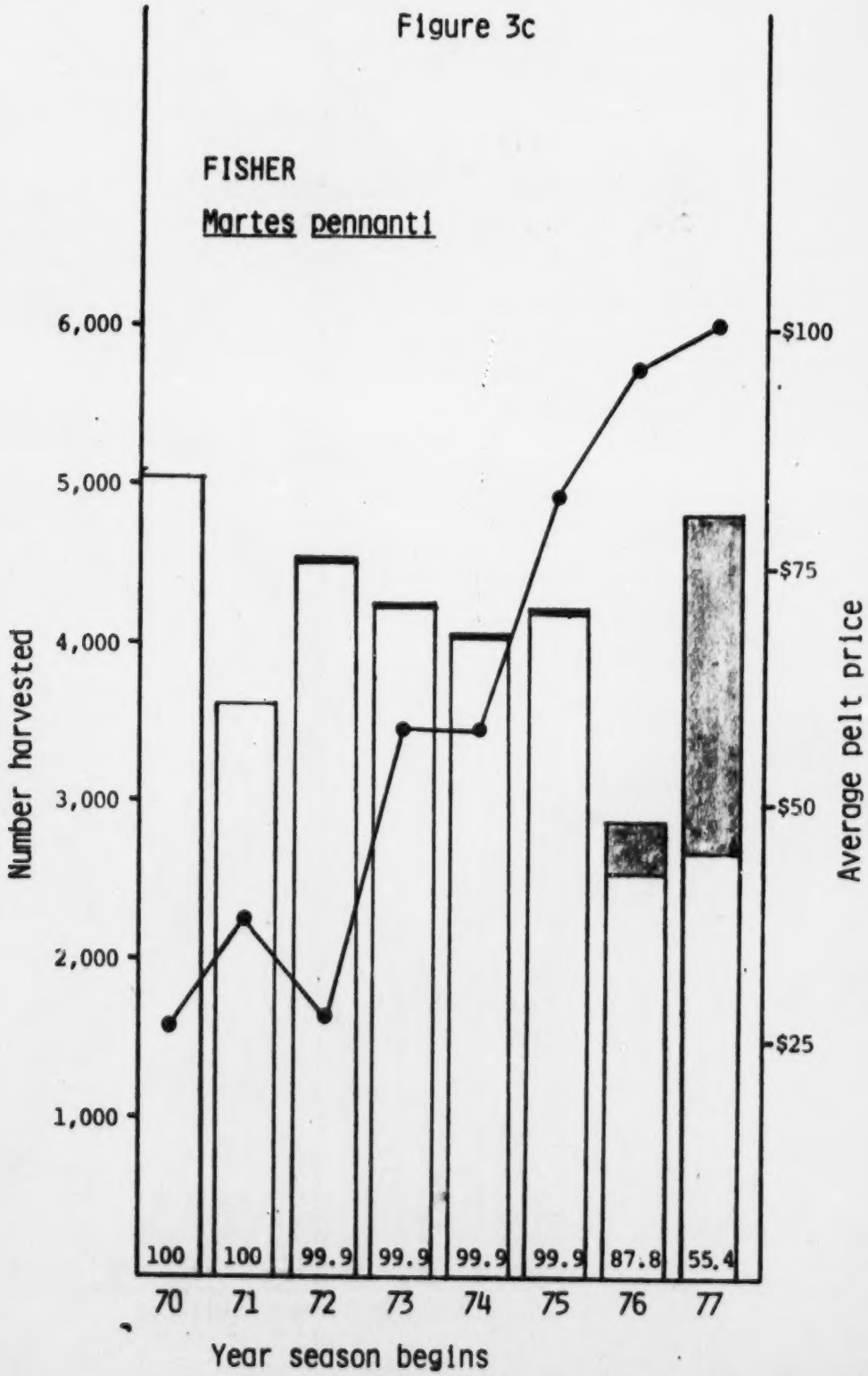
FISHER
Martes pennanti
6,000
5,000
4,000
3,000
2,000
1,000
Number harvested
$100
$75
$50
$25
Average pelt price
100
100
99.9
99.9
99.9
99.9
87.8
55.4
70
71
72
73
74
75
76
77
Year season begins

Figure 3d

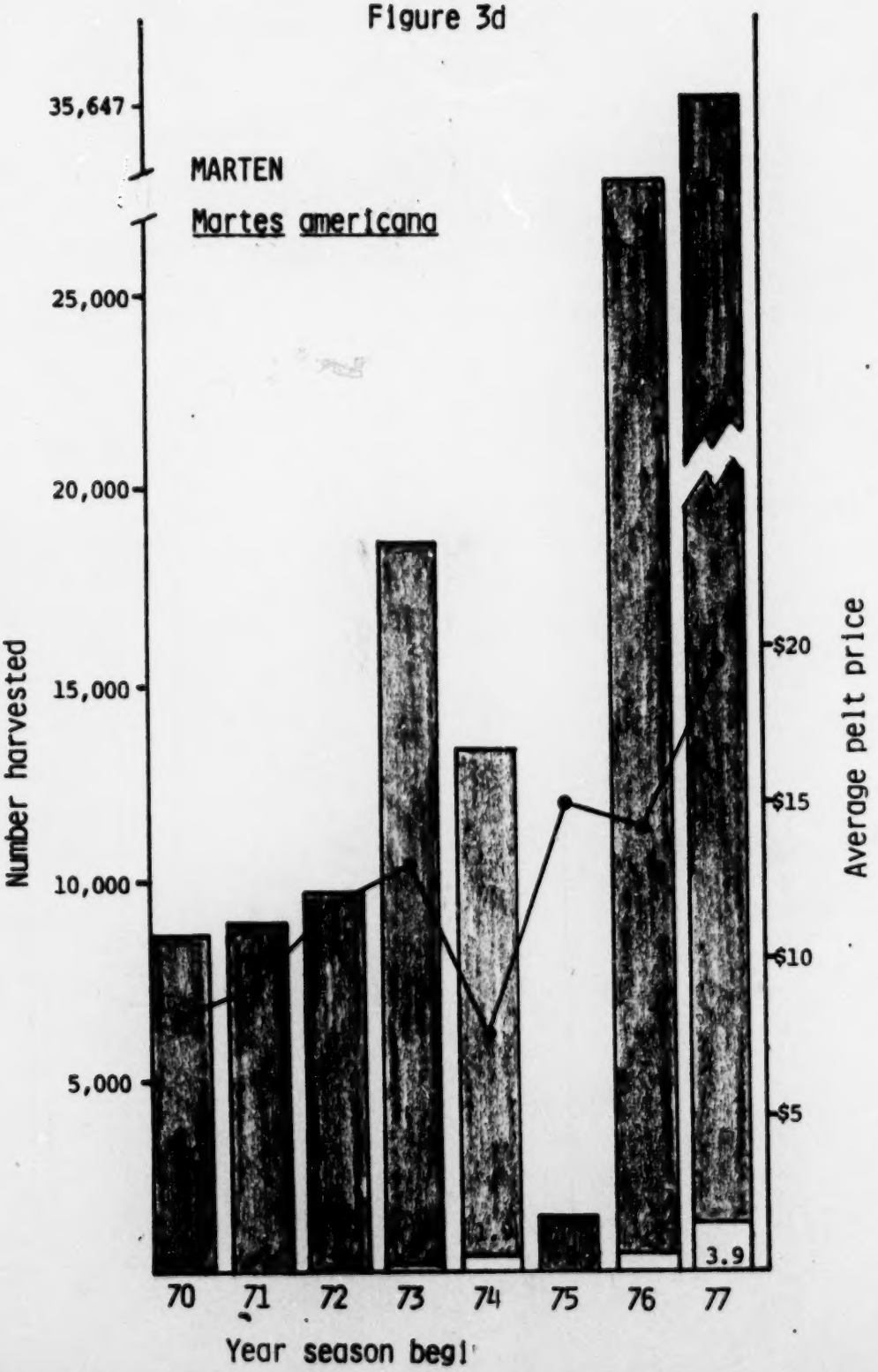
35,647
MARTEN
Martes americana
25,000
20,000
15,000
10,000
5,000
Number harvested
$20
$15
$10
$5
Average pelt price
3.9
70
71
72
73
74
75
76
77
Year season begi

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Beaver *Castor canadensis*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	259	433	499	516	516	56	321	427		
Delaware	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Maine	6288	10,895	11,054	12,804	11,303	8595	9632	11,182		
Maryland	69	181	313	224	178	158	177	153		
Massachusetts	509	1358	1674	1639	1441	1135	1558	1066		
New Hampshire	2771	3106	4770	4885	4109	4328	4020	3935	4085	
New Jersey	NR	NR	NR	NR	NR	NR	116	121		
New York	2840	5647	12,417	7492	8166	10,444	12,178	6636		
Pennsylvania	2528	3382	5845	5482	3130	3779	3292	1110		
Rhode Island	NR	NR	CS?	CS?	CS	CS	CS	CS	CS	CS
Vermont	1565	2758	3706	2627	1999	1396	1401	2433		
Total	16,829	27,760	40,278	35,669	30,842	29,891	32,695	27,063		
% of country	16.8	17.2	17.7	21.1	18.5	15.9	14.0	13.1		
Avg. pelt price	$10.00	12.00	14.00	13.50	11.00	6.00	16.00	10.93		

Coyote *Canis latrans*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	NR	NR	NR	NR	NR	NR	NR		
Delaware	X	X	X	X	X	X	X	X	X	X
Maine	NR	NR	NR	77	190	NR	320	379		
Maryland	NR	NR	NR	NR	NR	NR	NR	NR		CS
Massachusetts	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
New Hampshire	NR	NR	13	17	35	43	82	60	124	
New Jersey	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Pennsylvania	X	X	X	X	X	X	X	X	X	X
Rhode Island	NR	NR	CS?	CS?	CS	CS	CS	CS	CS	CS
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total	0	0	13	94	225	43	402	439		
% of country	0	0	.02	.08	.13	.02	.13	.12		
Avg. pelt price	$13.00	18.00	20.50	17.00	17.00	45.00	45.00	45.00		

Figure 3e

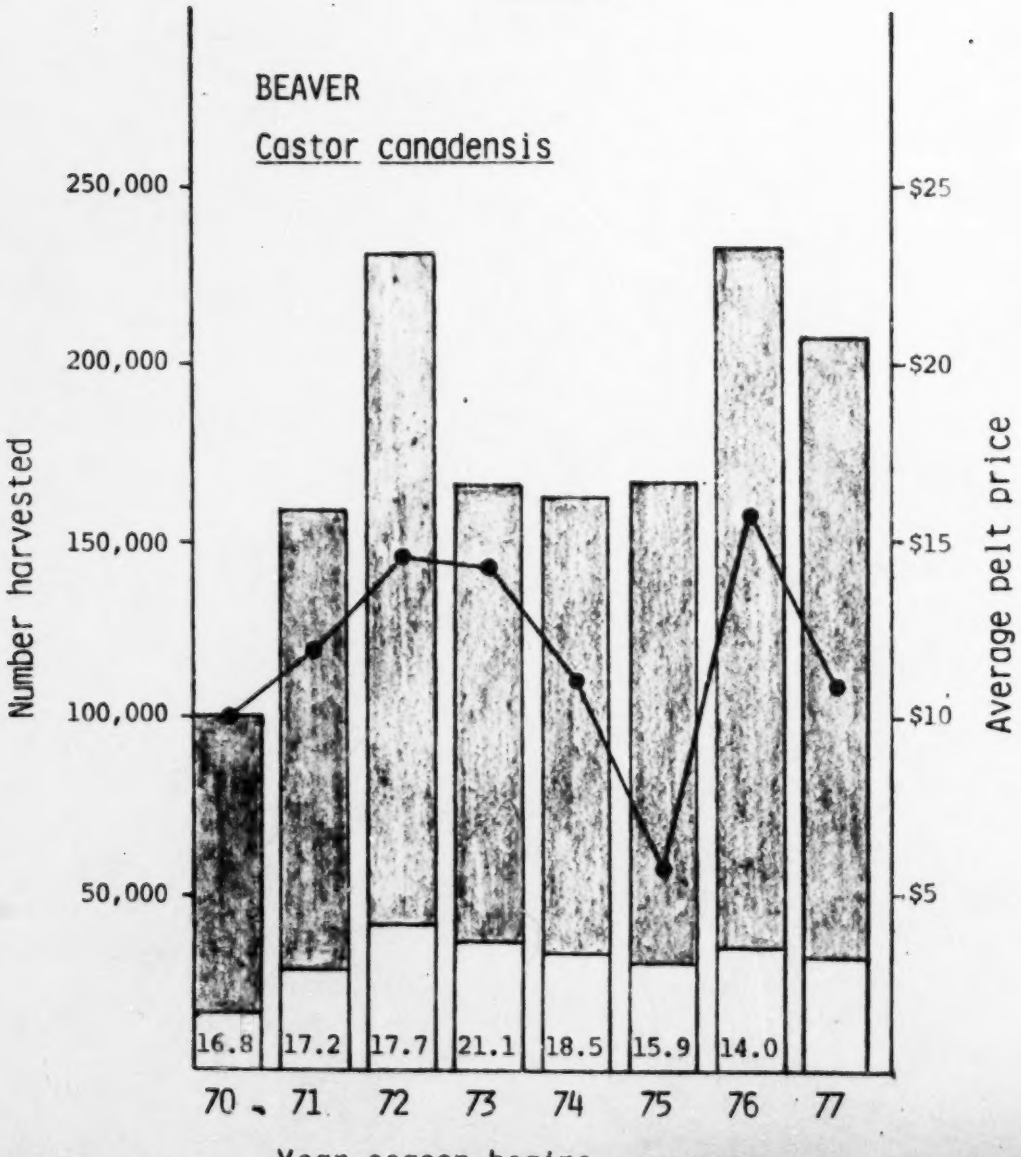

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TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Gray Fox *Urocyon cinereoargenteus*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	NR	NR	NR	NR	10 *	I	I		
Delaware	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Maine	I	I	I	I	I	I	I	I	I	I
Maryland	182	490	333	878	2586	2424	2030	1780		
Massachusetts	54	55	157	199	285	175	254	300		
New Hampshire	NR	135	133	127	124	136	198	168	133	
New Jersey	NR	NR	NR	NR	NR	2063	2817	5300		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Pennsylvania	3101	3703	5328	9362	11,401	12,742	13,954	16,786		
Rhode Island	I	I	I	I	I	I	56	24		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	3337	4383	5951	10566	14,396	17550	19309	24358		
% of country	12.8	14.9	9.8	9.7	9.8	10.7	8.6	9.2		
Avg. pelt price $	3.50	3.50	14.00	15.00	13.00	17.00	34.00	30.96		

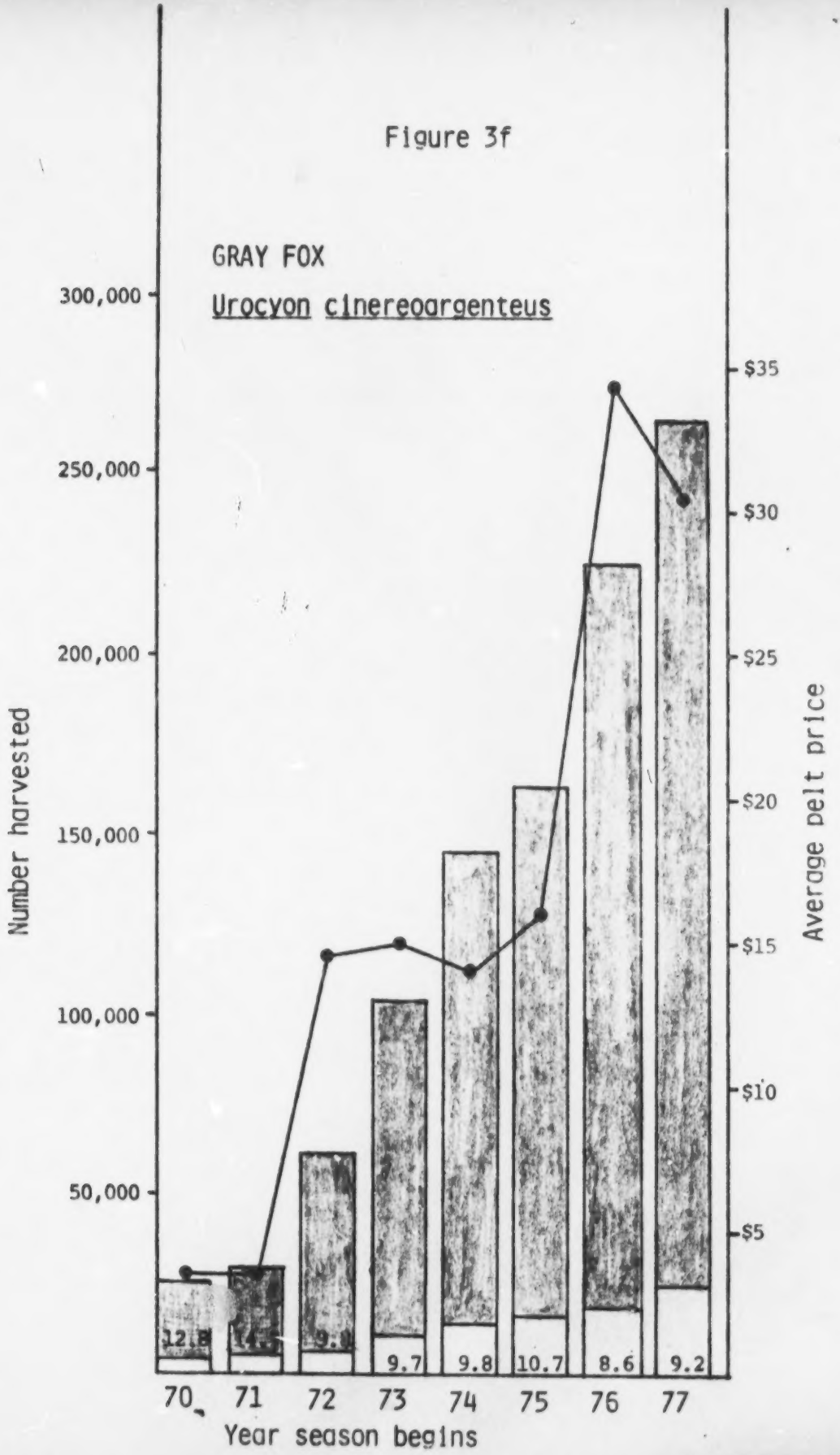
* Report required only if taken on state owned lands. Actual total manyfold more.

Red Fox *Vulpes fulva*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	53	89	69	56	37	41	1860		
Delaware	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Maine	1036	1695	2295	5472	6402	6853	5203	6529		
Maryland	362	600	496	1108	4654	4620	3928	4318		
Massachusetts	154	225	341	495	487	342	453	620		
New Hampshire	247	176	315	819	847	985	1163	1354	1602	
New Jersey	NR	NR	NR	NR	NR	3989	3693	6100		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Pennsylvania	4637	4441	5840	10,073	11,114	12,120	16,527	19,426		
Rhode Island	43	14	49	26	42	51	129	24		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Total	6479	7204	9425	18062	23,602	28997	31,164	40231		
% of country	4.2	4.7	5.0	6.4	9.9	10.7	8.7	12.9		
Avg. pelt price	$12.00	17.00	25.00	36.00	30.00	30.00	48.00	62.63		

Figure 3f

GRAY FOX

Urocyon cinereoargenteus



BEST AVAILAB

Figure 3a

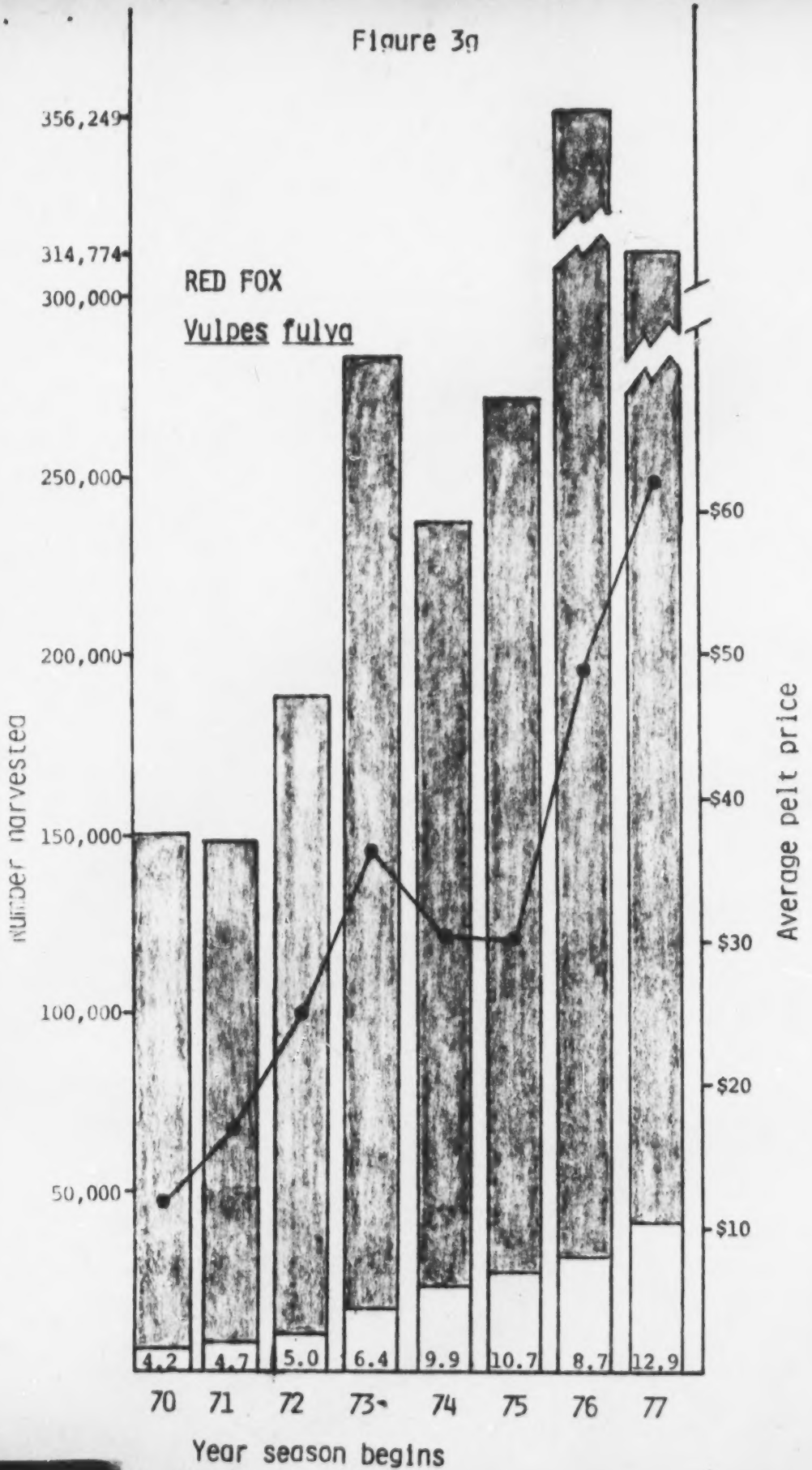

356,249
314,774
300,000
250,000
200,000
150,000
100,000
50,000
RED FOX
Vulpes fulva
Number harvested
Average pelt price
$60
$50
$40
$30
$20
$10
4.2
4.7
5.0
6.4
9.9
10.7
8.7
12.9
70
71
72
73
74
75
76
77
Year season begins

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Muskrat *Ondatra zibethica*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	2344	3041	2401	2867	2385	1668	NR		
Delaware	50,000	70,000	55,965	72,300	92,748	54,100	42,570	52,144		
Maine	26,967	29,460	NR	64,753	76,048	49,628	34,750	NR		
Maryland	114,971	277,608	160,284	178,494	259,421	376,036	417,400	183,108		
Massachusetts	51,314	42,679	44,186	71,930	66,247	44,998	47,085	49,804		
New Hampshire	6538	5672	7702	10,125	11,570	7800	8997	12,002	14,355	
New Jersey	NR	NR	NR	NR	NR	654,436	486,017	432,000		
New York	NR	NR	NR	NR	1,237,965	911,133	669,174	≈850,000	≈850,000	
Pennsylvania	310,311	385,245	394,863	458,677	494,272	407,732	354,929	412,058		
Rhode Island	5259	2185	1553	1976	1542	2561	3241	2656		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR		
Total	565,360	815,193	667,594	860,656	2,242,680	2,510,809	2,065,831	1,993,772		
% of country	13.0	19.7	14.5	13.9	40.6	39.1	28.9	32.1		
Avg. pelt price	$ 1.40	2.25	3.00	3.00	3.00	3.50	4.75	5.40		

Raccoon *Procyon lotor*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	224	287	211	303	248	324	NR		
Delaware	5000	5000	6154	6428	4083	2500	10,304	10,347		
Maine	23,000	25,000	50,693	7503	9728	7291	7700	24,069		
Maryland	5290	18,222	13,604	17,786	33,408	43,752	47,243	26,458		
Massachusetts	3694	2267	3450	5254	5278	5572	8053	13,924		
New Hampshire	577	859	2011	2348	2568	1978	2049	2423	2927	
New Jersey	NR	NR	NR	NR	NR	23,153	29,861	37,000		
New York	NR	NR	NR	NR	NR	NR	NR	NR		
Pennsylvania	40,941	47,651	82,123	131,849	148,123	185,299	179,543	223,132		
Rhode Island	319	115	120	229	181	234	520	153		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR		
Total	78,821	99,338	158,442	171,608	203,672	270,027	285,597	337,506		
% of country	7.2	7.4	8.3	6.5	7.0	8.4	7.5	8.9		
Avg. pelt price	$ 3.50	6.50	10.00	15.00	12.00	19.00	26.00	23.32		

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Opossum *Didelphis virginiana*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	NR	NR	NR	NR	43	NR	NR		
Delaware	600	500	NR	NR	NR	NR	NR	NR		
Maine	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Maryland	397	1383	1531	3544	8950	10,976	9948	4670		
Massachusetts	33	47	127	288	611	586	514	420		
New Hampshire	NR	NR	NR	NR	NR	NR	NR	NR	NR	
New Jersey	NR	NR	NR	NR	NR	20,422	15,615	22,000		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Pennsylvania	6200	9223	24,454	56,461	76,776	73,297	95,629	68,416		
Rhode Island	32	5	73	29	62	63	110	71		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total	7262	11153	26185	60322	86399	105,387	121,816	95,577		
% of country	7.2	8.5	10.4	12.1	11.9	14.4	11.4	10.1		
Avg. pelt price $	.85	2.50	3.00	2.50	2.50	2.50	2.50	2.35		

Mink *Mustela vison*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	67	67	76	87	51	35	NR		
Delaware	NR	35	50	50	50	50	NR	NR		
Maine	35	2529	NR	2420	4349	4449	2790	NR		
Maryland	NR	310	142	358	737	556	447	368		
Massachusetts	509	601	523	680	1172	852	808	1196		
New Hampshire	420	337	366	665	776	621	652	949	777	
New Jersey	NR	NR	NR	NR	NR	593	1022	1900		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Pennsylvania	3378	4053	4261	5646	5625	4870	4852	4596		
Rhode Island	175	61	32	143	95	79	144	62		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total	4517	7993	5441	10038	12891	12121	10,750	9071		
% of country	2.9	5.6	2.8	3.7	5.1	5.2	3.4	3.6		
Avg. pelt price $	7.50	9.50	12.00	11.50	8.00	10.00	14.00	12.00		

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARERS (1970-1979)

Striped Skunk *Mephitis mephitis*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	NR	NR	8	6	2	1	NR		
Delaware	500	1000	NR	NR	NR	NR	NR	NR	NR	
Maine	NR	311	167	734	992	1017	1000	NR		
Maryland	29	166	51	141	557	334	390	238		
Massachusetts	14	NR	19	55	349	36	84	102		
New Hampshire	34	25	102	151	239	262	420	489	499	
New Jersey	NR	NR	NR	NR	NR	3292	2282	4500		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Pennsylvania	933	1271	2460	4731	4898	4257	3727	4955		
Rhode Island	19	43	31	28	23	28	54	62		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total	1529	2816	2830	5848	7064	9228	7958	10346		
% of country	7.2	17.1	8.3	9.6	8.8	11.9	4.6	6.0		
Avg. pelt price $	1.00	2.50	2.75	3.00	1.50	1.50	2.25	3.31		

Long-tailed Weasel *Mustela frenata*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	NR	7	7	4	11	2	1	NR		
Delaware	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Maine	1210	887	NR	632	734	738	364	NR		
Maryland	21	28	18	55	155	92	57	45		
Massachusetts	30	NR	8	34	38	33	7	8		
New Hampshire	117	108	125	164	173	120	59	96	57	
New Jersey	NR	NR	NR	NR	NR	351	393	700		
New York	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Pennsylvania	396	451	674	1392	1764	1571	1294	1452		
Rhode Island	10	8	3	13	11	4	16	2		
Vermont	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total	1784	1489	835	2294	2886	2911	2191	2303		
% of country	16.5	42.4	18.4	31.9	33.2	41.5	16.4	22.9		
Avg. pelt price $	.60	.50	.50	.50	.50	.90	1.00	1.35		

TABLE 3

HARVEST NUMBERS OF NORTHEASTERN FURBEARS (1970-1979)

Black Bear *Euractos americanus*	70-71	71-72	72-73	73-74	74-75	75-76	76-77	77-78	78-79	79-80
Connecticut	CS	CS	CS	CS	CS	CS	CS	CS	CS	CS
Delaware	X	X	X	X	X	X	X	X	X	X
Maine	970	989	786	1066	744	947	1008	1066	1320	1630
Maryland	?	?	?	?	?	?	?			CS
Massachusetts	4	0	1	0	2	3	3	0	5	3
New Hampshire	293	334	273	356	280	326	≈225	≈225	≈225	271
New Jersey	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
New York	725	458	435	522	446	491	525	537	597	676
Pennsylvania	?	?	?	?	?	?	?	?	?	?
Rhode Island	X	X	X	X	X	X	X	X	X	X
Vermont	243	322	237	171	227	149	263	?	?	?
Total	2235	2103	1732	2115	1699	1916	≈2024	≈1828	≈2147	2580
% of country	?	?	?	?	?	?	?	?	?	?
Avg. pelt price	$20.00	25.50	58.00	53.00	53.00	44.00	44.00			

Source: International Association of Fish and Wildlife Agencies, 1976; State Wildlife Agencies, pers. comm., 1980; Endangered Species Scientific Authority records, 1980.